

# UNIVERSITY OF LOUISIANA AT LAFAYETTE

## CHEM. 107 (General Chem. I) Spring - 2009

(ID # 213539, Sect. 002)

<http://www.louisiana.edu/~ssm3124>

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Lecture: 11:00 – 11:50 am MWF, in MY Bldg 108

Office Hours: 10:00 – 10:50 am MW, 9:00 – 10:00 am TR, and by appointment.

### Required Materials:

1. Chang, R. General Chemistry: The Essential Concepts, Fifth Edition, McGraw Hill Publishers, New York, NY, 2008.
2. A scientific calculator for all lectures and its instruction manual for certain operations.

### Prerequisite:

Mathematics 105 or 109 is a pre- or core-quisite to be enrolled in Chem 107. Also, some knowledge of basic chemistry is very helpful.

### **Course Coverage\*:**

January 14 & 16:

**Chapter 1:** Introduction

**January 19:**

**NO CLASSES (Martin Luther King - Holiday)**

January 21 - 30:

**Chapter 2:** Atoms, Molecules, and Ions

February 2 - 16:

**Chapter 3:** Stoichiometry

February 18:

**Chapter 4:** Reactions in Aqueous Solutions

**February 20, Friday:**

**Hour Exam 1 (Chapters 1-3)**

February 23-25:

**NO CLASSES (Mardi-Gras - Holiday)**

February 23 – March 6:

**Cont. Chapter 4:** Reactions in Aqueous Solutions

March 9 - 16:

**Chapter 5:** Gases

March 18 & 20:

**Chapter 6:** Energy relationship in Chemical Reactions

**March 23, Monday:**

**Hour Exam 2 (Chapters 4-6)**

March 25-30:

**Chapter 7:** The Electronic Structure of Atoms

April 1- 8:

**Chapter 8:** The Periodic Table

**April 10-19:**

**NO CLASSES (Easter & Spring Break - Holiday)**

April 20 & 22:

**Chapter 9:** Chemical Bonding I: The Covalent Bond

**April 24, Friday:**

**Hour Exam 3 (Chapters 7-9)**

April 27:

**Cont. Chapter 9:** Chemical Bonding I: The Covalent Bond

April 29 & May 1:

**Chapter 10:** Chemical Bonding II: The Molecular Geometry

**Monday, May 4 (2:00 - 4:00 pm): FINAL EXAM (Comprehensive covering Ch. 1-10)**

\* Dates may change

### Examinations:

**February 20, Friday:**

**Hour Exam 1 (Chapters 1-3)**

**March 23, Monday:**

**Hour Exam 2 (Chapters 4-6)**

**April 24, Friday:**

**Hour Exam 3 (Chapters 7-9)**

**Monday, May 4 (2:00 - 4:00 pm):**

**FINAL EXAM**

**(Comprehensive Exam. covering all topics in this course; Chapters 1-10, attendance at the final is mandatory!)**

**THERE ARE NO MAKE-UP EXAMINATIONS.** If an hour examination (other than the final examination) is missed for any reason, the score on that examination will be the single examination score that is not counted in the final grade. If two or more examinations are missed, it is unlikely that a passing grade will be received in the course, and it is highly recommended that the student withdraw from the course. In the event a student is absent on the day an hour exam is given and the absence is excused (sickness, death in the family) for a verifiable university recognized reason, arrangements must be discussed individually to make-up the exam within **TWO days effectively from the day of the test given.** The excuse must be given to me in writing and signed by the student. If an absence is unexcused, a zero will be given for the exam missed. Only one test may be made-up this way.

**Test Methods:** Multiple choice, “fill in the blanks”, short essay style, calculations and chemical equation analysis, interpretation: how, why and what questions.

**Grading:**

	<u>% of course grade</u>	<u>Grade Scale</u>
Three Hour Exams*	66%	A: 90-100%
( <b>ONLY</b> the score of the <b>best two tests</b> will be counted; score of the lowest one hour exam will be dropped from your average)		B: 80-89%
Final Exam	34%	C: 70-79%
		D: 60-69%
( <b>Two</b> one hour exams + final exam)	100%	F: < 60%

**Complaints:** All grading complaints must be brought to my attention within **Two days** of return of the graded material in order to receive adjustment. These should be placed in writing and submitted on paper.

**Drops:** The last day to drop a class with a grade of “W” is **Monday, March 9, 2009.**

**Attendance:**

Students must attend one of the first two class sessions to secure enrollment. Attendance at other lectures is strongly encouraged and it is required only in the days of examinations. Roll is not taken and attendance is not required but poor attendance in these courses has usually resulted in low grades. In addition to the assigned reading in the text, the student is responsible for all material presented in lecture. ***Also, students must be sure that their cell phones are OFF before coming to the class.***

**Academic Misconduct & Cheating:**

Cheating, dishonesty, plagiarism or deception in fulfilling requirements will not be tolerated. Penalties include failing the course and referral to university judiciaries. The penalty of cheating on an examination is a grade of zero on that examination. That score will not be dropped when determining the final grade. Students are expected not share a calculator during an exam. Calculators used on an exam must have only a single display and must display numbers only; no programmable calculators are allowed!! Electronic communication devices such as cell phones and calculators with infrared communication ports are not permitted in the test room during examinations. Their presence will be considered evidence of cheating.

**Homework Problems for Chem 107**

The following homework problems are recommended from your textbook but are not collected. However, you should work as **many** related problems from your text as you can. Some questions deal with general concepts, which you should be able to explain when you have finished the chapter. Other problems are for developing good skills. Ideas in these problems are often reworded for discussion questions on exams.

The following are the problems assigned for each chapter:

**Chapter 1:** 8, 10, 12, 18, 19, 22, 24, 26, 30, 36, 40, 42, 56.

**Chapter 2:** 10, 12, 14, 16, 22, 30, 34, 38, 42, 46, 48, 50, 52, 56, 58, 60, 62, 64, 68, 72, 73.

**Chapter 3:** 14, 16, 18, 24, 26, 30, 34, 40, 43, 44, 46, 48, 52, 54, 60, 64, 66, 70, 74, 76, 81, 82, 84, 86, 90-92, 100, 102.

**Chapter 4:** 8, 10, 12, 18, 22, 24, 32, 34, 40, 42, 46, 48, 56, 60, 66, 68, 74, 80, 94, 96.

**Chapter 5:** 14, 20, 24, 34, 36, 38, 48, 50, 58, 62, 72, 82, 84, 87, 94.

**Chapter 6:** 16, 26, 28, 32, 50, 54, 58, 61, 64, 70.

**Chapter 7:** 8, 16, 20, 30, 32, 40, 42, 48, 52, 56, 62, 76, 82, 84, 88, 94.

**Chapter 8:** 18, 20, 28-32, 38, 44, 52, 55, 60, 72, 76, 79, 80, 90, 104.

**Chapter 9:** 16-18, 34, 37, 42, 43, 50, 53, 54, 68-70, 76, 81, 95, 106.

**Chapter 10:** 7, 10, 12, 33, 34, 38, 41, 42, 50, 54, 56, 58, 61.